


1



kind, but if  
Baking Pow  
how light a  
how her ca  
and she will

**Remember** No baking powder as Cleveland's

of times each second. Dr. Ball that the hardness and impenetrability of water is due at first sight seem to be the result of the mobility of a mass of rapidly moving particles, but the well-known impenetrability of the gem arises, he says, from the fact that when attempt is made to press a steel point into a stone it falls into the spaces between the molecules, rather than the latter the metal with such extraordinary force that they refuse to allow it to penetrate even to mark the crystallized surface. The glowing of the diamond in the Dutch seems so hard, is really composed of moving atoms; the glass which is but merely a mass of moving molecules, and seems to happen is that as the diamond is

ditional experiments made abroad with aluminum bronzes show, as reported, that the more boron is added, the alloy becomes denser and consequently more durable in service. It appears, too, that this aluminum bronze casts and melts well, and is also in some of the drawbacks met with in connection with the ordinary aluminum bronzes. It is also pointed out that the addition of that alloy in obtaining a uniform mixture of boron in the metal is not without difficulties, sometimes forms on the surface of the metal, and, being accompanied by surface corrosion, the aluminum boron alloy forms, at a lower temperature than when pure boron is added. The process of preparation consists in first making lumps of iron containing boron, then heating these lumps in a furnace in iron, these ingots are melted by introducing aluminum into a furnace, and the resulting alloy, which has been heated in an oxygen furnace until fumes of boron fluorine are evolved, is then cast into the desired shape in the aluminum, the latter being in the liquid state.

formed crystalline and brittle. As the aluminum content increases, the alloy forms the aluminum boron bronze in which is not brittle. The effect on the strength of the alloy is not great. The addition of silicon, which latter is so destructive to silicon, when present even in minute quantities.

board which pivots from its upper end and is connected to the bottom of the roller to suit the character of the material with which the collecting roller is to be used. The construction is otherwise convenient way, and positively does not require the cotton to be drawn over the roller, the weight of cotton in the well as well as the area of the delivery orifice, being sufficient to keep the cotton in place. To keep this uniform, special means are provided. This consists of a beater, revolving in the center of the roller, and having delivery rollers, and thus tending to throw the cotton over the roller. The beater has a lever the lever of the beater the latter has a lever, when the box fills, then any excess of cotton is thrown over the roller and is directed upward on to a special apron, which also has a lever, which is connected to the return direction—the result being that the cotton is thrown over the roller again raised by the spiked apron.

The inventor has constructed a new improved working capacity, among the features enumerated being that the valves are constructed in such a manner that in the center, and the pressure being applied in all directions, perfect balance is maintained, by so doing the friction is reduced, and the pressure being applied is the result, as explained, the valves being balanced, and having the cotton being held at boiler pressure within the same being maintained in the same manner.

tion and a high degree of economy. The construction is such as to be in taking up the slightest wear, and the wheels are made of only a cent. of the engine's power is required, thus saving twenty per cent. in twenty per cent. in fuel.

has for some time been given by to a new kind of forge, which has the r, y, p, m, and appliances for manufacturing wagons from one piece of either iron or steel—that is, the wagon inside the wheels, axles, springs, etc.—the inside being accomplished by means of a die; and in a comparatively short time, a WAGON is formed there

the need of angle iron, or steel, for the purpose of bracing the roof. This has far made in this line show that the use of mild steel for the purpose, there is no doubt, is the best. It is, of course, without making bad corners; it is said, that at the whole season, when finished, the roof is so strong, that it will not even saw or crack anywhere visible, it being made of such great strength and tension in the operation. The roof is so constructed as to be able to bring the water to the gutters, the tropic, says a writer in the *Architect*, great caution has to be exercised in the use of material, the unfortunate fact of all bricks made near the seaboard, or seashore, are exceedingly susceptible to the weather, and rapidly moulder away, and it is not safe to build with them at some distance from the sea. For fresh water, special care being required, and the use of stone is better. In such a climate, where fuel is generally expensive is most difficult to find, and the use of brickwork with plaster, a method of building, especially so, is to be avoided. The use of the mortar is also to be avoided for a few years, but it is ultimately necessary to use it, and it is better to use it at a whitewash from time to time, as a coat of whitewash has been used in the interior of the roof, and the use of plaster and other works of that material, will only throw off the moisture on the interior, and so the interior of the roof free from moisture.

It is made of a remarkable geological formation found in Finland, a stone which fore-

change in color the probable cause of the weather in the near future, being, in a ternal thermometer, and known by the barometer. It is said to turn black before an approaching rain, while in fine it is mottled with spots of white. It is not for a long time this interesting phenomenon has been the subject of observation, on an analysis of the stone it is found to be a fossil mixed with clay and composition of rock salt and nitre. This known, an explanation of the changes appearance of the material becomes apparent, the salt, absorbing the moisture, while the condition of the atmosphere, while the dryness of the atmosphere naturally bring out the salt from the stone in white spots on the surface.

der costs so much to make  
No other gives such value.

**PROBES OF YOUNG DRAMATISTS**

Playwrights Whose Experiences Were Harder Than the Average.

the troubles of aspiring dramatists are pretty known, but the experience of two who really came under the notice of a play reader at the theatre in this city was harder than the average. A young man sent from a Western city a memorable short production which it was a few moments to discover was utterly useless. A manuscript was returned with the only courteous note, and the kind-hearted, firm, mindful of the enthusiastic letter which accompanied the play, added a few sympathetic words, principally in reference to the play's idea, and the cheerful rules of the theatre. A short time afterward a young man sent himself at the theatre and found he was not good, so," he said, "and I sent you last month."

[illegible]

One May Visit It Now and May See Things Worth Seeing.

The average New Yorker still believes that the Library remains as its former loft location wherein some mouldy books and imposing pictures could be seen between 11 o'clock every day at the next except Sunday, Monday, Friday, and Saturday by those persons who had obtained cards from the "Librarian" who that they had never committed crime. The average New Yorker is behind the times in things relating to New York. It may be gracious to suggest that "it was a mistake" in taking away the library's charter that would have led to a sense of the duty of the citizens, but

the collection of books is not great, but it contains a few rare books, and the library now is open most of the time to the public. One can go in and look about and find answers to one's questions. The collection of books is not great, but it contains a few rare books, and the library now is open most of the time to the public. One can go in and look about and find answers to one's questions.

Plague Believed to Be the Same, and to Be Bred by Flith.

Plague raging in China. It is now said, is the same as the epidemic known in history as the Great Plague of London. The plague first broke out in London late in the autumn of 1664, and was at its most virulent during the following winter and spring, but in May broke out again in the parish of St. Giles and St. Martin. It was then the extreme west end of the city. It took the epidemic six months to reach the east end, but its progress, if slow, was sure, and tens of thousands of people perished. The disease increased steadily in violence during the course of the summer, and was at its height in the autumn.

[illegible]

instilling a sense of urgency in the public and mark the first time a disease has been declared a national emergency. The book is written in a style that is both informative and entertaining, and it is a must-read for anyone who is interested in the history of medicine and public health. The book is a well-written and informative account of the history of the disease, and it is a must-read for anyone who is interested in the history of medicine and public health. The book is a well-written and informative account of the history of the disease, and it is a must-read for anyone who is interested in the history of medicine and public health.

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|